DOCUMENT RESUME

ED 368 385

IR 054 956

AUTHOR

Wright, A. J.

TITLE

Copyright in Cyberspace: Intellectual Property and

Electronic Media and Networks.

PUB DATE

13 Dec 93

NOTE

15p.

PUB TYPE

Viewpoints (Opinion/Position Papers, Essays, etc.)

(120)

EDRS PRICE

MF01/PC01 Plus Postage.

DESCRIPTORS

Computer Networks; *Copyrights; Databases; Downloading; Electronic Publishing; *Fair Use (Copyrights); Futures (of Society); Information Dissemination; *Information Networks; *Legal Problems; Legislation; Policy Formation;

Preservation; Privacy; Reprography;

*Telecommunications; Videotape Recordings

IDENTIFIERS

*Cyberspace; Electronic Document Delivery; National

Information Infrastructure; Print Media

ABSTRACT

The increasing presence of electronic materials, databases, and networks in society's institutions raises a number of new questions related to copyrighted and intellectual property in cyberspace environments (e.g., How will the fair use provision of U.S. copyright law and practice be extended to electronic situations?). Such questions have attracted the attention of the Congress and federal government since at least 1976. The ease of transferring massive amounts of data electronically permits easy misuse. One group working to address some of these issues is the Working Group on Intellectual Property of the Information Policy Committee of the National Information Infrastructure Task Force, which considers the issues of copying for preservation as well as those of the creation of new digital products. It is possible, however, that electronic media and networks may offer solutions to problems associated with copyright in a print-based context, such as those involved in the distribution of scholarly publications. Societal practices may mitigate some of these problems as well. The public perception of fair use, as seen in videotaping and photocopying practices, is already at odds with copyright law, and current fair use provisions are virtually unenforceable except in blatant violations. Perhaps the law will change to conform to society's usage. (Contains 21 references.) (SLD)

******************************* Reproductions supplied by EDRS are the best that can be made

from the original document. ***********************************



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improven EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.

 Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this docu-ment do not necessarily represent official OERI position or policy

COPYRIGHT IN CYBERSPACE: Intellectual Property and Electronic Media and Networks

A.J. Wright

December 13, 1993

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY A.J. Wright

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERICL"

The increasing presence of electronic materials, databases and networks in society's institutions raises a number of new questions related to copyright and intellectual property in "cyberspace" environments. How will the fair use provision of U.S. copyright law and practice be extended to electronic situations? Under the 1976 Act works are protected by copyright from the moment of creation; in an electronic environment, how is such a "moment" to be fixed? If an electronic work is to be registered, which version of a perhaps endlessly-dynamic document is to be submitted? Is plagerism easier in cyberspace? Will text-based equivalents of the technological "sampling" of music recordings proliferate? What will be the impact on copyright of increasing numbers of electronic-only books and journals? (Basch, Eisenberg, McMillan) Will our current concepts of author, editor and publisher change in this almost-liquid environment? These and related questions are urgent enough that the U.S. Congress and Federal government have been stuggling with them since at least 1976. (U.S. Congress; U.S. House of Representatives; U.S. Library of Congress; U.S. National Commission on New Technological Uses of Copyrighted Works; U.S. Senate)

Copyright is a term designating the rights granted to creators of literary and other works; these rights give such creators control over the copying and public performance of their works. In the United States copyright law has its basis in the Constitution (Art. 1, sect. 8, cl. 8), which gives Congress authority to pass appropriate laws. Legislative highlights related to copyright in the United States include the following:

- 1790 Congress passed first federal copyright act
- 1834 In Wheaton v. Peters the U.S. Supreme Court ruled that all published works must comply with the federal statute requiring protection. Unpublished works could be protected under state laws.
- 1909 New federal copyright law recognized registration for such unpublished works as dramas, lectures and paintings



- 1955 Universal Copyright Convention becomes effective in signatory nations (U.S. included)
- 1976 New federal copyright law passed, formally recognizing protection for all unpublished works. Became effective in 1978.
- 1980 Computer Software Act allowed copyright protection for computer software
- 1988 Congress passes a law implementing the Berne Convention for the Protection of Literary and Artistic Works, orginally signed by a number of nations in Berne, Switzerland in 1886

In order to obtain copyright protection, an author must create an original expression; but "[t]he standard for originality is very low...To use an extreme example, if two poets, each working in total isolation...were to compose identical poems, both...would meet the originality requirement for purposes of the copyright statute." (Carroll) U.S. copyright grants a creator seven rights (adapted from Carroll):

- 1) reproductive right-right to make copies
- 2) adaptive right-right to adapt derivative works
- 3) distribution right-right to distribute copies
- 4) performance right-right to perform the work publicly
- 5) display right-right to display the work publicly



- 6) attribution right-right of creator to claim authorship and prevent use of name in connection with a work he did not create
- 7) integrity right-right to prevent distortion or destruction of the work

"Not all of these rights apply to all types of works...The attribution right and integrity right apply only to works of visual art." (Carroll)

The opposite of copyright is public domain status in which rights have expired, been abandoned or were not applicable. Length of U.S. copyright protection, like that of patents and trademarks, is finite, and depends on when a work was created in relation to the 1976 law. In effect, works copyrighted prior to 1938 are now in the public domain.

Copyright is an exclusive right, but not an absolute one. Since the purpose of copyright is to strike a balance between a creator's right to protect his work and the use of such work in the advancement of art, science or education, a doctrine called "fair use" has been developed that allows users in certain contexts to copy or otherwise use a work without permission from the copyright holder. Over the years courts have ruled a number of actions to fall within fair use guidelines, including quotations from a work for certain purposes; reproduction by libraries to replace damaged or stolen copies when the work cannot be reasonably replaced any other way; and reproduction of a small part of a work by teachers or students for educational purposes. Court decisions in this area take into account one or more of four factors to decide if a use constitutes "fair" use; these include purpose of the use, nature of the copyrighted work, amount of the work used, and the impact of the use upon a work's market. (Carroll) Court decisions have not produced specific guidelines in this area, although copyright holders such as some publishers have developed their own guidelines on word count limits in quotations and so forth.



Electronic information formats and access are just the latest technological developments to challenge the integrity of copyright law provisions. Proliferation of photocopy machines into libraries, offices and homes is another recent example greeted with much wailing and gnashing of teeth by intellectual property producers. (Gipe, 41-81) Such producers have managed to come to terms over the past couple of decades with the ubiquitous nature of photocopiers. In order to achieve fair user compliance, producers "cannot rely on libraries and copy shops to monitor fair copying. They must appeal to the user's scruples and awareness of the law.

Realistic legal rules must depend upon a social consensus about what kind of behavior is acceptable and what is not. Tha consensus is still being created for electronic publishing." (Duggan, 20)

Thus the individual researcher expects to combine his desktop storage, manipulation software and online access to vast databases to build his personal library in much the same way he uses (or abuses) photocopiers. "[T] he reuse of integrated commercial information seems in compliance with copyright law." (Duggan, 22) Yet the ease of transfering massive amounts of data electronically, as in the ease of photocopying, allows easy misuse as well. Since the only criminal violations of copyright law arc those committed for commercial gain, owners must pursue other violations via civil suits---not a quick or inexpensive alternative. Copyright owners must be prepared to educate users and be willing to negotiate common-sense provisions for fair use of electronic information if wide-spread abuse is to be avoided. (Duggan)

The eletronic medium itself can be the source of problems. Passage of the Computer Software Copyright Act of 1980 gave software producers ammunition to prevent illegal use of their products, which they felt included unlicensed dsitribution of the software medium, i.e., floppy disks and so forth. This desire to prevent distribution was



codified in the Computer Software Rental Amendments Act of 1991, "giving software producers the exclusive right to control public availability of their programs." (Valauskas, 41) This act was quickly amended to give "nonprofit libraries...the freedom to circulate software...Software is still a product of the mind, and, as such, libraries are guaranteed the freedom to make it available." (Valauskus, 41 and 43) Besides, software producers have learned to bundle their easily-copied software with support services for the registered user to encourage legal purchases. (Besen, 19-20)

The current fierce debate over privatization of the Internet and electronic copyright issues intersect in some fascinating ways. In the past producers of some kinds of intellectual property such as television and radio programs have been able to make profits even though vast audiences view and/or listen to their products for free. Advertising has supported these products and others; many newspapers and magazines make a profit primarily on advertising revenue. (Besen, 15-18) Many small press publications are issued at a loss by "volunteer" editors, writers and others; and professional societies often issue journals without ad-

vertising support. Yet the variety of materials available today would by much reduced if such support were not feasible.

One of the attracitons of the Internet for many of its current users is the relatively low cost of access and the storehouse of materials and tools developed and made available by voluntary labor. Yet the presence of advertising in some form might allow continued low cost access for many and the development of new services for Internet users.

The ability to capture revenue via advertising may provide a means by which some producers will be willing to offer intellectual property at little or no cost on the Internet. This kind of support is one of the four main methods producers have traditionally used in seeking revenue for their work. Another includes bundling a private good with a public one to encourage the latter. User services provided to legal software purchasers is one example; program guides and premiums provided to contributors to public radio and television stations are others. Additional methods of support include



direct sales to consumers, as with book purchases; and government and nonprofit institutional support of much basic medical and scientific research. (Besen, 15-25) Intellectual properties offered in electronic formats and media also need support from one or more of these revenue streams.

Chairman of the Board Curtis Benjamin of the McGraw-Hill Book Company has postulated a chiling future of the marriage between intellectual property and electronics. "Let us suppose a large corporation --- say a Monsanto or a DuPont ---has established a company-wide (and hence a nationwide) computerized technical information system for use at the touch of dozens of consoles by it hundreds of scientists and enigneers. Let us also suppose that the 'hardware' camp has prevailed in the copyright arguement and that the corporation is free to store the whole of Perry's _Chemical Engineers' Handbook in it's computerized system. Let us finally suppose that the corporation buys one copy of this handbook, stores its content, and then puts it to...seemingly 'fair' uses...Obviously, in a situation such as this one the stored copy could take the place of as many as 500 or even 1,000 copies of the handbook as it is now used. And if eight or ten

other large corporations did likewise, there would be no remaining market sufficient to sustain publication. And soon no one would bother with compiling, editing, and printing a work of this sort. What then?" (Gipe, 109-110)

Benjamin's vision was published in April, 1966, and less than thirty years later has been implemented in just the way he described in corporations, libraries and other organizations around the world. Yet producers of intellectual property, via site licenses, improved access and content over printed versions and other mechanisms, have managed to adapt to a scenerio that Benjamined predicted would destroy their markets. As in the past intellectual property has proven remarkably adaptable to distribution



and profit via new technology.

In a recent article Mary Brandt Jensen has written, "The technology for converting most information to electronic form is available at prices affordable to many libraries. Why then is the percentage of library materials accessible in electronic formats so low? The thesis of this article is that the current state of copyright law is inhibiting the development of the Library Without Walls." (Jensen, 1) Her article covers many of the issues raised in the collision between copyright law and electronic med.a, access and distribution.

Jensen first describes what a "library without walls" might be like if copyright law was not a consideration. Such a library "would be a system providing connections between patrons from almost anywhere and information from almost anywhere." (Jensen, 4) However, since intellectual property issues must be considered, Jensen devotes much of her article to exploration of four areas in which copyright law fair use provisions intersect with the electronic library: displays and performances; reproduction; distribution; and interlibrary cooperation. Her conclusions in each area include the following points.

DISPLAY/PERFORMANCE: "...fair use probably permits some public performances and displays associated

with electronic works and systems." (Jensen, 14) How far these rights can be extended have yet to be determined and will depend on how many electronic situations can be defined as fair use

REPRODUCTION: "The same fair use criteria that apply to reproducing parts of a work stored in any other medium should apply to downloading parts of an electronic work. (Jensen, 16) However, one difference in the electronic environment may be that



libraries will be considered to have more control over patron copying than with print material if the material copied originates on a libraries main computer or on a remote computer to which the library provdes access.

DISTRIBUTION: "...if a reproduction by or for the patron would be fair use, electronic distribution to that patron would also be fair use." (Jensen, 22)

INTERLIBRARY COOPERATION: This area includes loan activities and cooperative collection development. "The only provisions in the Copyright Act which deal specifically with interlibrary cooperation are contained in Section 108. Although Section 108 was drafted at a time when most interlibrary cooperation occurred in the form of physical photocopies delivered by surface mail or couriers, there is nothing in the statute itself or the legislative history that would indicate that most subsections concerning interlibrary cooperation could not be applied to the use of newer technologies." (Jensen, 23)

Jensen's discussion of these aspects basically concludes that print fair uses under copyright law can be applied in an electronic context, although much interpretation of specific situations will have to take place. However, her conclusion discusses the major problem the electronic library faces with regard to copyright: complete printed works cannot be converted to electronic form without copyright holder permission except in a few very

restricted situations. Jensen argues that libraries will need the kind of compulsory license agreements Congress has granted the cable television industry; otherwise, tracking down and paying individual copyright holders will be too ex-



pensive for libraries to undertake.

Another author who has recently tackled issues surrounding copyright and electronic media is Jane C. Ginsburg. Her article considers two aspects of this area, hard copy material that migrates into digital format and material that begins life as an electronic document. The first section outlines many potential conflicts between historical practices and electronic media, and notes that "...in a model in which hardcopy copyright concepts continue to dominate, fair use will remain shaped by the model of the printed book. That means, for example, that the law imposes a wall between the first, free, digital onscreen copy and the subsequent multiple copies that can be viewed simultaneously." (Ginsburg, 59) In the purely digital realm, producers may abandon copyright and seek contract protection instead. "In the world here posited, the publishers abandon copyright and seek to regulate all use by contract, on the premise that where copyright's protections have nothing more to offer them than do contract and technological controls, copyright take together with its exceptions, especially fair use, offers them less. In pressing a contract claim, the publisher is seeking to achieve copyright-like protection, unencumbered by copyright's countervailing limitations." (Ginsburg, 61-62)

The situation today produces considerable anxiety in a number of groups. Just how nervous some producers can be is indicated by a recent development at the Library of Congress, where "...library officials have known for some time that deposits [for copyright] were lagging far behind the number of CD-ROM publications on the market...The reason publishers were not complying with the deposit requirements of the copyright law was fear: fear that once the public had access to CD-ROMs in a reading room, they would easily be duplicated, offered on computer networks and their market destroyed...To answer these worries, the library and three organizations representing CD-ROM publishers have endorsed four documents. The documents establish the ground rules for access to CD-ROMs in the public reading rooms fo the Library of Congress." (D'Ooge, 404) These agreements control display

of the products on terminals in LC reading rooms.

One group attempting to address some of these issues is the Working Group on Intellectual Property of the Information Policy Committee of the National Information Infrastructure Task Force, which held a public hearing on November 18, 1993, in Washington, D.C. (Peters) Testifying on behalf of several library and education organizations was Robert L. Oakley, who discussed problems associated with the copyright law as presently written and digital media. Oakley noted that current law provides for preservation copying in facsimilie form only, a procedure that will not work for digital formats expected to last "...only 15 to 20 years--much shorter than the life expectancy of paper." (Oakley) Preservation of digital information often requires migration "...to the next technological generation" instead of mere facsimilie copying. (Oakley) Oakley also discussed copyright problems that arise in trying to create new digital products. For instance, developers of the Library of Congress' multimedia American Memory Project have had difficulty tracing copyright holders for many of the textual, photographic and manuscript materials they wished to include. (Oakley) Technological capabilities often far exceed the boundaries and limitations of copyright law.

On the other hand, electronic media and networks may offer solutions to problems associated with copyright in a print-based context. "In scholarly journal publishing... authors freely assign their ownership rights to publishers. The irony here is that university libraries are being forced to pay spiraling subscription costs for information created and given away by faculty members whose research was supported largely be public grants and these same university library reousrces. (TRLN, 15) An alternative distribution method for scholarly publication might be electronic media and networks in which authors and their institutions retain copyright. Numerous prototypes are already appearing on the Internet in the form of peer-reviewed electronic journals such as Postmodern Culture and preprint or manuscript repositories accessible via ftp or gopher.

Ore of the best resources for information on the collision of cyberspace and copyright and intellectual property issues is the CNI-COPYRIGHT@CNI.ORG Internet



discussion group. Although wide-ranging with regard to copyright, electronic issues frequently surface on this forum, which provides an excellent source of thought-provoking material. In September 1993 a spirited discussion developed over the issue of copyright and electronic reserves in libraries; a posting from Jeff Rosedale of Columbia University Libraries neatly summed up the issues. "The copyright law that is supposed to regulate the intersection of these interests is not adaptable to electronic technologies as it is currently written. Because of this fact, electronic reserves remains an elusive vision for the time being---but I believe there is mounting frustration over the discrepancy with the ease and low expense of the technology versus the costs and intractable difficulties of obtaining permissions for many kinds of material." (Rosedale)

Pehaps societal practices will mitigate many of these problems in the near future. "The average citizen is developing the habit and expectation that copying is ok for their own use (taping a TV program, copying a CD to a cassette for the car, photocopying a magazine article, etc.). By the next generation (perhaps as early as ten years from now), the public's perception of fair-use will be that everything except out-and-out commercial copying is ok. The law will then either be changed to conform to society or it will be unenforceable." (Tenney) I would contend that such public perception of fair use is already widespread, if not nearly universal, and that given current technology and human ingenuity, copyright fair use provisions are currently unenforceable except in the most blatent of violations.



REFERENCES

- Basch R. (1991) Books online: visions, plans and perspectives for electronic text. Online 15(4):13-23
- Besen SM. (1987) New Technologies and Intellectual Property: An Economic Analysis. Washington, D.C.: National Science Foundation
- Carroll T. (1993) Frequently asked questions about copyright.
 (v. 1.0.1) USENET newsgroups misc.legal, misc.legal.computing, misc.int-property. (ftp: charon.amdahl.com /pub/misc.lgal/Copyright-FAQ)
- D'Ooge C. (1993) First CD-ROM titles deposited under new agreement. Library of Congress Information Bulletin 52 (20):404-405
- Duggan MK. (1991) Copyright of electronic information: issues and questions. Online 15(3):20-26
- Eisenberg D.(1989) Problems of the paperless book. Scholarly Publishing pp 11-26, October
- Ginsburg JC. (1993) Copyright without walls: speculations on literary property in the library of the future. Representations 42:53-73, spring
- Gipe GA. (1967) Nearer to the Dust: Copyright and the Machine. Baltimore: Williams and Wilkins
- Jensen MB. (1993) Is the library without walls on a collision course with the 1976 Copyright Act? Law Library Journal fall (in press; page citations refer to manuscript version supplied to the author)
- McMillan G, et al. (1991) Electronic journals: considerations for the present and future. Serials Review 17(4): 77-86
- Oakley RL. (1993) NII hearing on copyright. cnicopyright@cni.org, November 22



- Peters PE. (1993) Intellectual property issues involved in the NII initiative. cni-announce@cni.org, October 26
- Rosedale J. (1993) Electronic storage. cni-copyright@ cni.org, September 13
- Tenney G. (1993) Re: consortium to discuss electronic storage. cni-copyright@cni.org, September 24
- TRLN Copyright Policy Task Force. (1993) Model university policy regarding faculty publication in scientific and technical scholarly journals: a background paper and review of the issues. Public-Access Computer Systems Review 4(4):4-25
- U.S. Congress. Office of Technology Assessment. (1984-1985) Intellectual Property Rights in an Age of Electronics and Information. 3 vols. and summary. Washington, D.C.: GPO
- U.S. House of Representatives.(1991) Computers and Intellectual Property: Hearings...Washington, D.C.: GPO
- U.S. Library of Congress. (1987) Intellectual Property in an Electronic Age: Proceedings...Washington, D.C.: LC
- U.S. National Commission on New Technological Uses of Copyrighted Works. (1976) Preliminary Report. Washington, D.C.: GPO
- U.S. Senate. (1986) OTA Report on Intellectual Property Rights in an Age of Electronics and Information: Joint Hearing...Washington, D.C.: GPO
- Valauskas EJ. (1992) Copyright: know your electronic rights. Library Journal pp 40-43, August

